

CLAIMS

1. A case comprising a bottom plate in a substantially rectangular shape, and a first side plate and a second side plate rising respectively from a pair of
5 border lines forming the bottom plate and facing each other, either one edge side orthogonal to the pair of border lines being an entrance, an insertion being inserted toward the other edge side to be housed in the case,

wherein, on an inner surface of the first side plate where the first side plate and the second side plate face each other, a first rib having a top face
10 parallel to the inner surface of the first side plate is provided, with a height D1 between the inner surface of the first side plate and the top face of the first rib,

on an inner surface of the second side plate where the second side plate and the first side plate face each other, a second rib having a top face
15 parallel to the inner surface of the second side plate is provided so as to face the first rib, with a height D2 shorter than the height D1,

on the inner surface of the first side plate on the entrance side with respect to the first rib, a first protrusion having a top face parallel to the inner surface of the first side plate is provided with a height D3 shorter than
20 the height D1, and

both a spatial distance D4 between the top face of the second rib and the inner surface of the first side plate, and a spatial distance D5 between the top face of the first protrusion and the inner surface of the second side plate allow a width D6 of the insertion in a facing direction of the first side plate
25 and the second side plate to be inserted with a loose fit.

2. The case according to claim 1, wherein, on the inner surface of the first side plate on the entrance side with respect to the first protrusion, a second protrusion having a top face parallel to the inner surface of the first side plate
30 is provided, with the height D3, and

on the inner surface of the first side plate between the first protrusion and the second protrusion, a rack is provided with a height D7 equal to or shorter than the height D3.

- 5 3. The case according to claim 1 or 2, wherein the insertion is a cartridge including an upper half and a lower half that face each other with a gap for housing a disk-shaped information medium placed therebetween, an opening window portion for exposing a part of the disk-shaped information medium through the upper half and/or the lower half, a shutter for opening and
10 closing the opening window portion, a front wall engaged with the shutter to connect the upper half to the lower half, a first side wall and a second side wall respectively being connected to the upper half and the lower half and to the front wall, and a back wall facing the front wall,

the cartridge also includes a first partial stepped groove formed on a
15 part of the first side wall, having a step in a direction toward the second side wall substantially at a center of the gap between the upper half and the lower half from an engagement line at which the first side wall is engaged with the front wall to the back wall, and a second partial stepped groove having a step in a direction toward the first side wall, formed on the second side wall at a
20 position facing the first partial stepped groove, and

the first protrusion and the first rib slide to contact the first partial stepped groove, and the second rib slides to contact the second partial stepped groove, whereby the cartridge is inserted into the case.

- 25 4. The case according to claim 3, wherein each front edge of the upper half and the lower half, engaged with the front wall, forms an arc-shape, and the shutter includes an opening and closing engagement member for opening and closing the opening window portion by rotating along the arc-shape,

the opening and closing engagement member is provided in a
30 full-length stepped groove having a step on the second side wall over an

entire length of the first side wall substantially at a center between the upper half and the lower half on the first side wall, has a first hole and a second hole with which the second protrusion is engaged, and a gear portion engaged with the rack between the first hole and the second hole.

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5. The case according to claim 1 or 2, comprising a third side plate rising from the other edge facing the entrance via the bottom plate, with the same height as that of the first side plate and the second side plate.

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6. The case according to claim 4, wherein the insertion has a box-shaped body including a front wall to be inserted through the entrance, and a first side wall and a second side wall, respectively facing the first side plate and the second side plate of the front wall, the box-shaped body including a first partial stepped groove having a first bottom portion with a dent D8, extending from an engagement portion between the first front wall and the front wall in parallel with the bottom plate, and a second partial stepped groove having a second bottom portion with a dent D8, extending from an engagement portion between the second front wall and the front wall in parallel with the bottom plate, and

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when the insertion is housed, a distance D9 between the first bottom portion and the second bottom portion is fit between the top face of the first rib and the top face of the second rib.

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7. The case according to claim 1, 2, or 5, comprising a cover using, as a rotation axis, either edge of the first side plate parallel to the bottom plate, either edge of the second side plate parallel to the bottom plate, an edge of the bottom plate forming the entrance, an edge facing the edge of the bottom plate forming the entrance via the bottom plate, or either edge of the third side plate parallel to the bottom plate.

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8. A method for opening a shutter of a cartridge by inserting, into the case of claim 1, the cartridge including an upper half and a lower half that face each other with a gap for housing a disk-shaped information medium interposed therebetween, an opening window portion for exposing a part of the
5 disk-shaped information medium through the upper half and/or the lower half, a shutter for opening and closing the opening window portion, a front wall engaged with the shutter to connect the upper half to the lower half, a first side wall and a second side wall respectively being connected to the upper half and the lower half and to the front wall, and a back wall facing the
10 front wall, and groove portions having steps on side walls respectively formed from boundary lines between the first side wall and the front wall, and the second side wall and the front wall, the method comprising:

a first step of inserting the cartridge into the entrance of the case;
a second step of inserting the first protrusion along the groove portion
15 formed on the first side wall; and

a third step of inserting the first rib along the groove portion formed on the first side wall, and inserting the second rib along the groove portion formed on the second side wall,

wherein an opening and closing engagement portion for opening and
20 closing the shutter is engaged with the first protrusion between the second step and the third step to open the shutter.

9. A method for opening a shutter of a cartridge by inserting, into the case of claim 2, the cartridge including an upper half and a lower half that face each
25 other with a gap for housing a disk-shaped information medium interposed therebetween, an opening window portion for exposing a part of the disk-shaped information medium through the upper half and/or the lower half, a shutter for opening and closing the opening window portion, a front wall engaged with the shutter to connect the upper half to the lower half, a
30 first side wall and a second side wall respectively being connected to the

upper half and the lower half and to the front wall, a back wall facing the front wall, each edge of the upper half and the lower half engaged with the front wall forming an arc-shape, groove portions having steps on the side walls respectively formed from boundary lines between the first side wall and the front wall, and between the second side wall and the front wall, and an opening and closing engagement member formed on the first side wall so as to allow the shutter to rotate along the arc-shape, thereby opening and closing the opening window portion, and having a first hole, a second hole, and a gear portion between the first hole and the second hole, the method comprising:

- a first step of inserting the cartridge into the entrance of the case;
- a second step of inserting the second protrusion along the groove portion formed on the first side wall, and engaging the second protrusion with the first hole provided in the opening and closing member;
- a third step of engaging the rack provided on the first side plate of the case with the gear portion to allow the shutter to rotate; and
- a fourth step of engaging the first protrusion provided on the first side plate with the second hole to complete an opening operation of the shutter.

10. The method for opening a shutter of a cartridge according to claim 9, wherein the cartridge further includes an opening and closing engagement member provided so as to control the rotation of the shutter, and in the opening and closing engagement member, a rotation suppressing portion for suppressing the opening operation of the shutter due to rotation by being engaged with the first hole, and an engagement removal portion for removing the engagement between the rotation suppressing portion and the first hole, and

the rack contacts the engagement removal member to remove the engagement between the rotation suppressing portion and the first hole between the first step and the second step.